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THE UNITED STATES OF AMERICA

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United States Patent and Trademark Office

April 22, 2005

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APPLICATION NUMBER: 60/539,948

FILING DATE: *January 29, 2004*

RELATED PCT APPLICATION NUMBER: *PCT/US05/02612*



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Under Secretary of Commerce
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16623 U.S. PTO
012904

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PTO/SB/16 (08-03)

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)					
Given Name (first and middle [if any])		Family Name or Surname		Residence (City and either State or Foreign Country)	
Albert		Asfour		Brighton, MI	
Michael		Jendro		Johnston, IA	
<input checked="" type="checkbox"/> Additional inventors are being named on the <u>1</u> separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
INTEGRALLY SEALED FILAMENT WOUND BEARINGS					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number 					
OR					
<input checked="" type="checkbox"/> Firm or Individual Name		John M. Harrington			
Address		Kilpatrick Stockton LLP			
Address		1001 West Fourth Street			
City		Winston-Salem	State	NC	ZIP 27101
Country		USA	Telephone	(336) 607-7300	Fax 336-607-7500
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages		1		<input type="checkbox"/> CD(s), Number _____	
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets		2		<input type="checkbox"/> Other (specify) _____	
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.					
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees					
<input type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: _____					FILING FEE AMOUNT (\$)
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					160.00
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted, Todd W. Galinski
SIGNATURE
TYPED or PRINTED NAME Todd W. Galinski
TELEPHONE (336) 607-7300

[Page 1 of 2]

Date 1/29/04
REGISTRATION NO. 51,713
(if appropriate)
Docket Number: GGB-7040

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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22154 U.S. PTO
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Docket Number GGB-7040		
INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign Country)
Michael Richard	Kim Saile	Marlton, NJ Phoenixville, PA

[Page 2 of 2]

Number 2 of 2**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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"Express Mail" mailing label number: EV 316334092 US

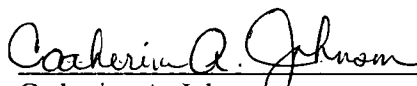
Date of Deposit: January 29, 2004

Type of Document(s): Provisional Patent Application
Cover Sheet;
Specification (1 page);
Two (2) Sheets of Drawings;
Check for \$160.00; and
Return postcard

Serial No.: Unassigned

Date Filed: Herewith

I hereby certify that the documents identified above are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Commissioner for Patents, Mail Stop Provisional Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.


Catherine A. Johnson

Integrally Sealed Filament Wound Bearings

Technical Description:

GGB currently manufactures Filament Wound self-lubricating bearings. Many of our customers require the use of seals with our bearings primarily due to the operating environment. Our customers currently use a separate seal (or seals) with our bearings. The goal of this project is to develop a bearing design which incorporates an integral seal (or seals) directly into the bearing.

Two integrally sealed filament wound bearing designs have been identified as candidates for further development. Concept 4 and Concept 6 are described below.

Concept 4

Concept 4 consists of a filament wound bearing with a wiper seal located at one or both ends of the bearing. To facilitate the seal installation, the filament wound bearing will have a counterbore machined into one or both ends of the bearing. A wiper seal is then pressed into the counterbore until flush (or recessed) with the end of the bearing. An adhesive (in the counter bore and/or on the seal OD) may be used to insure retention of the seal in the bearing. The complete integrally sealed bearing is then installed by the customer into their housing bore.

Concept 6

Concept 6 consists of three components including a filament wound bearing, one or two wiper seal(s) and a metal tube. The filament wound bearing would first be pressed into the center of the metal tube. A seal (or two seals) would then be pushed into the metal tube at each end of the bearing. The ends of the metal tube would then be formed to capture and retain the seal(s) and complete the integrally sealed bearing assembly. The complete integrally sealed bearing is then installed by the customer into their housing bore.

CONCEPT 4		REV.		COPIES OF THIS DRAWING ARE UNCONTROLLED "FOR REFERENCE ONLY" UNLESS STAMPED AND SIGNED BY APPLICATIONS ENGINEERING		BY CHK.	APPR.	DATE	CHANGE OR ADDITION	

.25 .09 20.0°

BILL OF MATERIALS						GGB				DATE	SCALE	CAGE CODE	QA	MFG	PACKING CODE	
ITEM	DESCRIPTION	MATERIAL				700 Mid Atlantic Parkway Thorofare, New Jersey 08086 USA 1-800-222-0147							DRAWN DAB	CHECKED	APPROVED	REF.
1	FILAMENT WOUND BEARING	VARIOUS														
2	WIPER SEAL	VARIOUS														

INTERPRET DRAWING PER ASME Y14.5 - 1994
 DIMENSIONS ARE IN MILLIMETERS [INCHES]

TITLE
 FILAMENT WOUND BEARING WITH INTEGRAL SEAL

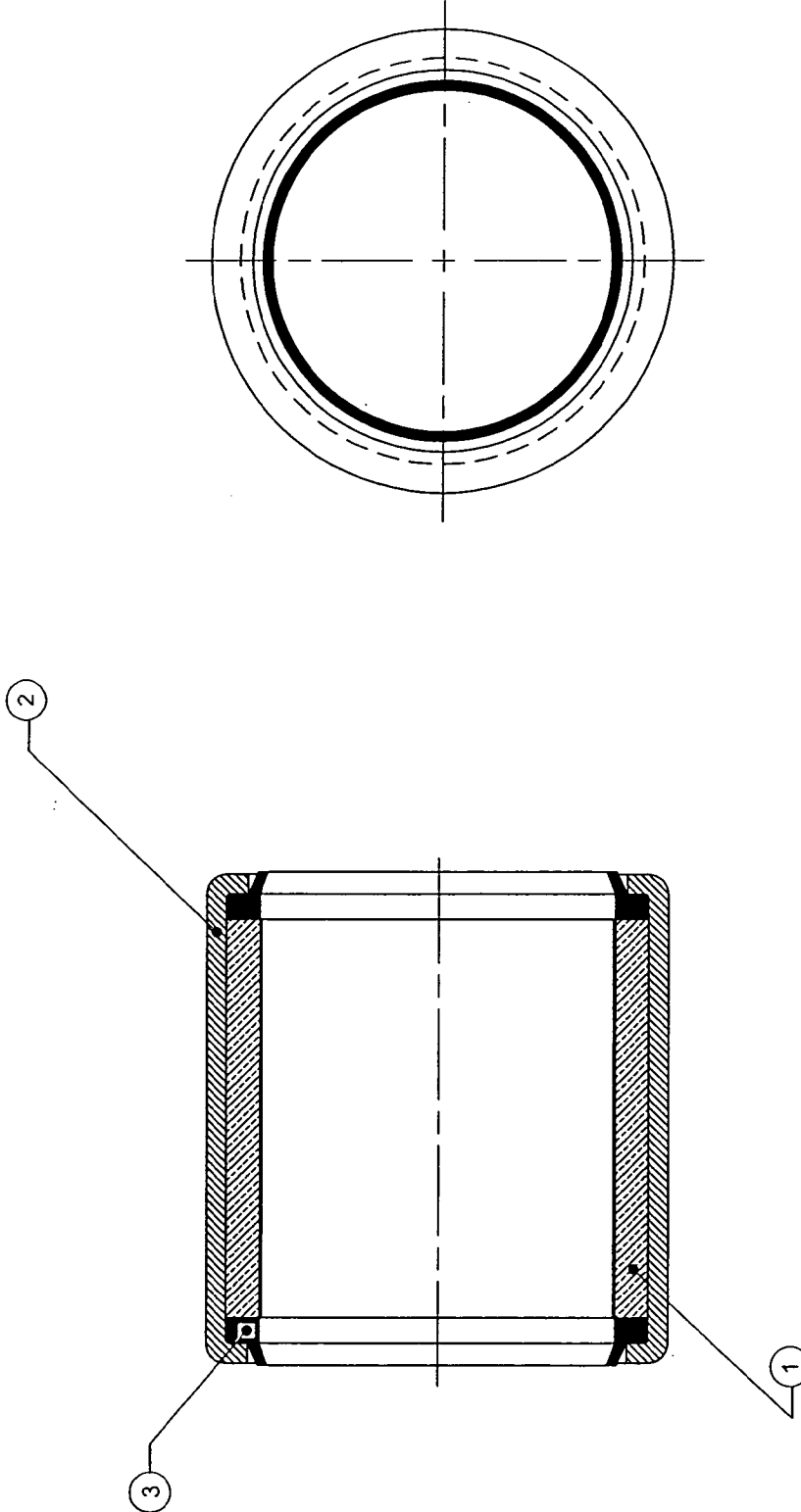
SIZE
 A

DRAWING NO.
 CONCEPT 4

REV.
 -

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BILL OF MATERIALS		GGB 700 Mid Atlantic Parkway Thorofare, New Jersey 08086 USA 1-800-222-0147		DATE	SCALE 1:1	CAGE CODE 26418	QA	MFG	PACKING CODE
ITEM	DESCRIPTION	MATERIAL		DRAWN DAB	CHECKED	APPROVED	REF.		
1	FILAMENT WOUND BEARING	VARIOUS							
2	METAL TUBE	VARIOUS							
3	WIPER SEAL	VARIOUS							
			INTERPRET DRAWING PER ASME Y14.5 - 1994 DIMENSIONS ARE IN MILLIMETERS [INCHES]						
			TITLE FILAMENT WOUND BEARING WITH INTEGRAL SEAL						
			SIZE A		DRAWING No.		REV.		
					CONCEPT 6				

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